

U.S. Department  
of Transportation

Federal Aviation  
Administration

Exemption No. 6480  
Regulatory Docket No. 27609

July 18, 1996

Mr. Aubrey Mark Shannon  
M. Shannon & Associates  
4038 128th Avenue SE.  
Suite 112  
Bellevue, WA 98006

Dear Mr. Shannon:

By letter dated July 9, 1996, you petitioned the Federal Aviation Administration (FAA) on behalf of M. Shannon & Associates for a reissuance of Exemption No. 5899, as amended. That exemption from Sections 91.9(a) and 91.531(a)(1) and (2) of Title 14, Code of Federal Regulations (14 CFR) permits M. Shannon & Associates and the operators of Cessna Citation 500, 550, and S550 model aircraft to operate these aircraft with a single pilot.

Although you request the reissuance of Exemption No. 5899, as amended, that exemption, as you note, expired on June 30, 1996. Therefore, the FAA finds it necessary to issue a new exemption. The FAA notes that in addition to your previously issued exemption, the FAA also recently issued other grants of exemption in circumstances similar in all material respects to those presented in your petition. Grant of Exemption No. 4050, as amended (copy enclosed) was issued to Cessna Aircraft Company to permit single pilot operations in Cessna Citation Models 550, S550, 552, and 560 aircraft. The FAA found that in light of the past operating experience of Citation airplanes certificated under 14 CFR part 23, an exemption with appropriate conditions and limitations would not have an adverse effect on safety in operations of Citation airplanes certificated under 14 CFR part 25.

Having reviewed your reasons for requesting an exemption, I find that they do not differ materially from M. Shannon & Associates' original request for an exemption, nor do they differ materially from those presented by the petitioner in the attached grant of exemption. In addition, I have determined that the reasons stated by the FAA for granting your original exemption and the attached exemption also apply to the situation you currently present. Accordingly, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. Sections 40113 and 44701, formerly Sections 313(a)

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and 601(c) of the Federal Aviation Act of 1958, as amended, delegated to me by the Administrator (14 CFR Section 11.53), M. Shannon & Associates is granted an exemption from 14 CFR Section 91.9(a) and 91.531(a)(1) and (2) to permit it and the operators of Cessna Citation 500, 550, and S550 model aircraft to operate these aircraft with a single pilot. This exemption is subject to the following conditions and limitations:

1. This exemption serves as a supplemental type certificate for those Cessna 500, 550, and S550 airplanes operated with a single pilot under the terms of this condition, provided the pilot has complied with all of the terms of this exemption.
2. This exemption is not effective unless M. Shannon & Associates' single-pilot training program receives and maintains approval from the FAA's General Aviation and Commercial Division, AFS-800, 800 Independence Avenue SW., Washington, DC 20591.
3. This exemption applies only to operations conducted under part 91.
4. Each pilot conducting single-pilot operations must:
  - a. Prior to operations, complete a single-pilot training program approved by AFS-800;
  - b. Hold a current first- or second-class airman medical certificate;
  - c. Hold an airline transport pilot certificate with a C-500 type rating or commercial pilot certificate with an airplane instrument rating and C-500 type rating;
  - d. Have logged at least 1,000 hours of total pilot flight time, including at least 50 hours flight time at night, 75 hours of instrument flight time, 40 hours of instrument flight time in actual instrument meteorological conditions, and 500 hours as pilot in command (PIC) or second in command, or a combination of both, in turbine-powered airplanes;
  - e. Not perform any circling instrument approaches to minimums of less than 200 feet and 1 mile above the published minimums until completion of at least 100 hours of single-pilot flight experience in a Cessna 500-series airplane;
  - f. Not perform any straight-in instrument approaches to minimums of less than 100 feet and one-half

mile above the published minimums until completion of at least 100 hours of single-pilot flight experience in a Cessna 500-series airplane;

- g. Use a boom microphone; and
  - h. Have a fully functioning autopilot, controllable about three axes that is capable of approach coupling.
5. The single-pilot initial authorization and authorization renewal training program must include the following:
- a. Ground instruction that includes:
    - i. The maneuvers and procedures specified in appendix A to part 61; and
    - ii. High altitude aerodynamics and special flight characteristics.
  - b. Flight simulator instruction that includes:
    - i. The maneuvers and procedures specified in appendix A to part 61;
    - ii. An instrument flight rules route segment with operations at an altitude that is at least 80 percent of the maximum certificated altitude;
    - iii. Landings at two different points, taking into consideration takeoff and landing performance requirements; and
    - iv. Circling approaches both to the left and to the right.
  - c. The instruction required in Condition No. 5(b) may be completed in one of the following two ways:
    - i. In an approved flight simulator, qualified as a Level B, Level C, or Level D flight simulator, provided the applicant has performed three takeoffs and three landings to a full stop as the sole manipulator of the flight controls in the Cessna 500-series make and model airplane within the preceding 90 days; or
    - ii. In an approved flight simulator, qualified as a Level A flight simulator, provided the applicant has accomplished the following maneuvers and procedures in the Cessna

500-series make and model airplane in flight:

- A. Preflight inspection
- B. Taxiing
- C. Normal takeoff
- D. Crosswind takeoff
- E. Instrument Landing System (ILS) approach
- F. Missed approach
- G. Simulated powerplant failure
- H. Normal landing
- I. Crosswind landing
- J. Landing with simulated powerplant failure.

6. An applicant seeking initial single-pilot authorization, in accordance with the provisions of this exemption, must accomplish the following:
  - a. Satisfactorily complete the training requirements as specified in the FAA-approved training course;
  - b. Satisfactorily accomplish the entire practical test in flight in a Cessna 500-series make and model airplane;
  - c. Satisfactorily accomplish the final practical test, which must be conducted:
    - i. Within 10 days after the training has been completed; and
    - ii. By an appropriately rated FAA-designated pilot examiner or an FAA inspector who is authorized and qualified to give such examinations in Cessna 500-series airplanes;
  - d. Except as provided in Condition No. 12, comply with the practical test requirements and standards appropriate to the grade and class of the pilot certificate that the applicant holds, and demonstrate proficiency in circling approaches both to the left and to the right; and
  - e. Satisfactorily perform all maneuvers and procedures throughout the entire practical test as a single pilot.
7. An applicant seeking renewal of single-pilot authorization in a Cessna 500-series airplane must accomplish the following:
  - a. Satisfactorily complete the training requirements as specified in the FAA-approved training course;

- b. Satisfactorily accomplish the entire practical test in one of the following three ways:
  - i. In flight, in the Cessna 500-series make and model airplane;
  - ii. In an approved flight simulator, qualified as a Level B, Level C, or Level D flight simulator, provided the applicant has performed three takeoffs and three landings to a full stop as the sole manipulator of the flight controls in the Cessna 500-series make and model airplane within the preceding 90 days; or
  - iii. In an approved flight simulator, qualified as a Level A flight simulator, provided the applicant has accomplished the following maneuvers and procedures in the Cessna 500-series make and model airplane in flight:
    - A. Preflight inspection
    - B. Taxiing
    - C. Normal takeoff
    - D. Crosswind takeoff
    - E. ILS approach
    - F. Missed approach
    - G. Simulated powerplant failure
    - H. Normal landing
    - I. Crosswind landing
    - J. Landing with simulated powerplant failure;
- c. Satisfactorily accomplish the final practical test, which must be conducted:
  - i. Within 10 days after the training has been completed; and
  - ii. By an appropriately rated FAA-designated pilot examiner or an FAA inspector who is qualified and authorized to conduct tests in the Cessna 500-series airplanes;
- d. Except as provided in Condition No. 12, comply with the practical test requirements and standards appropriate to the grade and class of the pilot certificate that the applicant holds, and demonstrate proficiency in circling approaches both to the left and to the right; and
- e. Satisfactorily perform all maneuvers and procedures throughout the entire practical test as a single pilot.

8. M. Shannon & Associates must provide a copy of this exemption to each person who is authorized to operate under the provisions of this exemption.
9. Each operator must carry a copy of this exemption on board each airplane when operating under the provisions of this exemption.
10. No operator may transfer the provisions of this exemption when or if ownership or lease of the airplane is relinquished.
11. The circling approach requirement must be accomplished in an airplane in flight or in a simulator equipped with a visual system that permits accomplishment of the circling approach task.
12. If the simulator used is not qualified for conduct of the circling maneuver, and the applicant does not demonstrate the circling maneuver:
  - a. The applicant's records will be annotated with the statement, "Demonstration of circling approach was not accomplished"; and
  - b. The applicant will be restricted from performing circling approaches as PIC when weather conditions are less than basic visual flight rules meteorological conditions until the circling approaches have been satisfactorily demonstrated in an actual airplane or simulator qualified for the circling maneuver to an FAA inspector or designated pilot proficiency examiner.
13. A person who has previously received single-pilot authorization in a Cessna Citation 500-series airplane must receive the FAA-approved differences training in order to obtain single-pilot authorization for a different Cessna Citation model.
14. A person requesting the single-pilot authorization must satisfactorily accomplish both ground- and flight-simulator training in accordance with the FAA-approved single-pilot training program and must receive training on the differences between the model represented by the simulator in which training is received and the model of Cessna Citation for which single-pilot authorization is requested.
15. A single-pilot authorization will be valid for 12 calendar months. A person who renews a single-pilot authorization in the calendar month before or after the calendar month in which it is due is considered to have

renewed the single-pilot authorization when due.

16. All Cessna 500-series airplanes that are permitted to be used under the terms of this grant of exemption must have the following equipment installed and operational:
  - a. Autopilot with approach coupling
  - b. Flight director system
  - c. Boom microphone
  - d. Transponder "ident" switch on the pilot's control wheel.
17. On or before March 31 of every year, M. Shannon & Associates must provide AFS-800 with an analysis of the operations conducted under this exemption with respect to operational exposure, accident/incident data, and any known problem areas.
18. M. Shannon & Associates will maintain the following records and make them available to the Administrator upon request:
  - a. The name, address, and dates of training enrollment and completion of each applicant who enrolls in its training course;
  - b. The date and location where the practical test was conducted, including the name of the FAA-designated examiner or FAA inspector conducting the test;
  - c. The names of those applicants who require more flight training to pass the initial authorization or authorization renewal than that prescribed in the FAA-approved training course;
  - d. The amount of additional training hours required by each applicant listed in accordance with Condition No. 18(a) to pass the flight check;
  - e. A list of those pilots who:
    - i. Failed to complete the training program satisfactorily; or
    - ii. Withdrew from the program, and the reasons for the withdrawal; and
  - f. The name, certificate number, and address of each person who is authorized to operate under this exemption.

This exemption terminates on July 31, 1998, unless sooner superseded or rescinded.

Sincerely,

/s/ William J. White  
Acting Director, Flight Standards Service, AFS-1

Enclosure